

## WHAT IS CLAIMED IS:

- 1           1.     A method for enabling re-use of presentation objects by a printing  
2 system, comprising:  
3           identifying an object for presentation by a printing system, and  
4           assigning a globally-unique identifier to the object.
- 1           2.     The method of claim 1 wherein the globally-unique identifier assigned  
2 to the object allows the object to be securely and correctly referenced for re-use.
- 1           3.     The method of claim 1 wherein the globally-unique identifier assigned  
2 to the object is platform-independent.
- 1           4.     The method of claim 1 wherein the globally-unique identifier is based  
2 upon an International Standards Organization administered global naming tree.
- 1           5.     The method of claim 1 wherein the globally-unique identifier is  
2 contained in a syntax structure of a data stream.
- 1           6.     The method of claim 5 wherein the data stream is a Mixed Object  
2 Document Content Architecture data stream.

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1           7.     The method of claim 1 wherein the assigning a globally-unique  
2 identifier further comprises:  
3           requesting, in an International Standards Organization administered global  
4 naming tree, a first node for an application that uses the object;  
5           registering, under the first node, a second node for each license of the  
6 application; and  
7           assigning a globally-unique identifier for the object, the globally-unique  
8 identifier including an indication of the object, the first node and the second node.

1           8.     The method of claim 1 wherein the assigning a globally-unique  
2 identifier further comprises generating a globally-unique identifier for an object, the  
3 generated globally-unique identifier includes an indication of a first node  
4 representing an application that uses the object, of a second node for each license  
5 of the application and of the object.

1           9.     The method of claim 8 wherein the indication of the object includes a  
2 time stamp.

1           10.    The method of claim 9 wherein the time stamp includes an indication  
2 of the date and time.

1           11.    The method of claim 8 wherein the indication of the object includes a  
2 checksum value.

1           12.    The method of claim 8 wherein the indication of the object includes a  
2   binary counter.

1           13.    A method for managing presentation objects for multiple use,  
2   comprising:  
3           caching an object when downloaded; and  
4           capturing the object in memory if a globally-unique identifier has been  
5   assigned to the object.

1           14.    The method of claim 13 wherein the memory comprises permanent  
2   storage.

1           15.    The method of claim 13 further comprising deleting previously  
2   captured objects to increase available capture storage area in the memory.

1           16.    The method of claim 15 wherein the deleting comprises deleting non-  
2   active, least-recently used objects first.

1           17.    The method of claim 15 wherein the deleting comprises largest objects  
2   first.

1           18.    The method of claim 15 wherein the deleting comprises smallest  
2   objects first.

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1 19. A method for processing referenced objects, comprising:  
2 referencing an object by selected indicia, the selected indicia being a name, a  
3 globally-unique identifier or a globally-unique identifier and an object locator;  
4 searching for the object by the selected indicia; and  
5 determining whether to capture the object based upon whether the selected  
6 indicia includes a globally-unique identifier.

1 20. The method of claim 19 wherein the referencing of the object is by an  
2 object name and the searching for the object is performed by object name.

1 21. The method of claim 20 further comprising attempting to find the object  
2 when the object resident in a presentation device is referenced with a globally-  
3 unique identifier.

1 22. The method of claim 21 further comprising downloading and capturing  
2 the object when the attempt to find the resident object fails and the object is  
3 referenced from a secure environment.

1 23. The method of claim 19 wherein the referencing of the object is by a  
2 globally-unique identifier.

1 24. The method of claim 23 further comprising attempting to find the object  
2 resident in the presentation device using a globally-unique identifier.

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1           25.    The method of claim 24 further comprising searching for the resource  
2 inline in a resource group in a print file when the search for a resident globally-  
3 unique identifier fails.

1           26.    The method of claim 25 further comprising downloading and capturing  
2 the object by the globally-unique identifier if the resource is found inline in a  
3 resource group in the print file and the object is secure.

1           27.    The method of claim 19 wherein the referencing of the object is by a  
2 globally-unique identifier and an object locator.

1           28.    The method of claim 27 further comprising attempting to find the object  
2 resident in the presentation device using a globally-unique identifier.

1           29.    The method of claim 28 further comprising searching for the resource  
2 inline in a resource group in a print file when the search for a resident globally-  
3 unique identifier fails.

1           30.    The method of claim 29 further comprising downloading and capturing  
2 the object by the globally-unique identifier if the resource is found inline in a  
3 resource group in the print file and the object is secure.

1           31.    The method of claim 29 further comprising looking for the object in a  
2 resource library by object locator when the inline search is unsuccessful.

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1        32.    The method of claim 31 further comprising determining whether the  
2 globally-unique identifier assigned to the object matches the globally-unique  
3 identifier referenced.

1        33.    The method of claim 32 further comprising downloading and capturing  
2 the object by the globally-unique identifier if the globally-unique identifier assigned to  
3 the object matches the globally-unique identifier referenced.

1        34.    The method of claim 32 further comprising indicating an error if the  
2 globally-unique identifier assigned to the object does not match the globally-unique  
3 identifier referenced.

1        35.    The method of claim 32 further comprising indicating an error if the  
2 object does not contain a globally-unique identifier.

1        36.    The method of claim 19 further comprising downloading the object  
2 without generating an error when a capture storage is full.

1        37.    A object data structure of a data stream for referencing and identifying  
2 presentation objects, the object data structure including a globally-unique identifier  
3 assigned to a presentation object, the globally-unique identifier providing integrity to  
4 object identification.

1        38.    The data structure of claim 37 wherein the globally-unique identifier  
2 assigned to the object allows the object to be securely referenced for re-use.

1 39. The data structure of claim 37 wherein the globally-unique identifier  
2 assigned to the object is platform-independent.

1 40. The data structure of claim 37 wherein the data stream is a Mixed  
2 Object Document Content Architecture data stream.

1 41. The data structure of claim 37 wherein the globally-unique identifier  
2 comprises a date and time stamp.

1 42. The data structure of claim 37 wherein the globally-unique identifier  
2 comprises a checksum value.

1 43. The data structure of claim 37 wherein the globally-unique identifier  
2 comprises a binary counter.

1 44. A system for managing presentation objects for multiple use,  
2 comprising:  
3 a cache for caching an object when downloaded; and  
4 printer capture storage for capturing the object if a globally-unique identifier  
5 has been assigned to the object.

1 45. The system of claim 44 further comprising a print server, the print  
2 server deleting previously captured objects in the printer capture storage.

1 46. The system of claim 44 further comprising a print server, the print  
2 server deleting previously downloaded or active objects.

1 47. The system of claim 46 wherein the previously downloaded or active  
2 objects exist in capture storage or cache storage.

1 48. The system of claim 46 further comprising a printer control unit for  
2 marking deleted objects in capture storage as removable.

1 49. The system of claim 48 wherein a removable object is deleted when a  
2 capture request is received to make storage available to capture a new resource.

1 50. A system for processing referenced objects, comprising:  
2 a print server for searching for an object referenced by a selected indicia in a  
3 data stream, the selected indicia being a name, a globally-unique identifier or a  
4 globally-unique identifier and an object locator; and  
5 a control unit for capturing the object;  
6 wherein the control unit determines if the object is to be captured based upon  
7 whether the selected indicia includes a globally-unique identifier.

1 51. The system of claim 50 wherein the data stream references the object  
2 by an object name and the print server searches for the object by object name.

1 52. The system of claim 51 wherein the print server attempts to find the  
2 object resident in a presentation device when the object is referenced with a  
3 globally-unique identifier.

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1           53.    The system of claim 52 wherein the print server downloads the object  
2   and the control unit captures the object when the attempt to find the resident object  
3   fails and the object is referenced from a secure environment.

1           54.    The system of claim 50 wherein the control unit references the object  
2   by a globally-unique identifier.

1           55.    The system of claim 54 wherein the print server attempts to find the  
2   object resident in the presentation device using a globally-unique identifier.

1           56.    The system of claim 55 wherein the print server searches for the  
2   resource inline when the search for a resident globally-unique identifier fails.

1           57.    The system of claim 56 wherein the print server downloads the object  
2   and the control unit captures the object by the globally-unique identifier if the  
3   resource is found inline and the object is secure.

1           58.    The system of claim 50 wherein the data stream references the object  
2   by a globally-unique identifier and an object locator.

1           59.    The system of claim 58 wherein the print server attempts to find the  
2   object by searching for a resident globally-unique identifier.

1           60.    The system of claim 59 wherein the print server searches for the  
2   resource inline when the search for a resident globally-unique identifier fails.

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1           61.    The system of claim 60 wherein the print server downloads and the  
2   control unit captures the object by the globally-unique identifier if the resource is  
3   found inline and the object is secure.

1           62.    The system of claim 60 wherein the print server looks for the object by  
2   object locator in a resource library when the inline search is unsuccessful.

1           63.    The system of claim 62 wherein the print server determines whether  
2   the globally-unique identifier assigned to the object matches the globally-unique  
3   identifier referenced.

1           64.    The system of claim 63 wherein the print server downloads the object  
2   and the control unit captures the object by the globally-unique identifier if the  
3   globally-unique identifier assigned to the object matches the globally-unique  
4   identifier referenced.

1           65.    The system of claim 63 wherein the print server provides an indication  
2   of an error if the globally-unique identifier assigned to the object does not match the  
3   globally-unique identifier referenced.

1           66.    The system of claim 63 wherein the print server provides an indication  
2   of an error if the object does not contain a globally-unique identifier.

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1           67.    An article of manufacture comprising a program storage medium  
2    readable by a computer, the medium tangibly embodying one or more programs of  
3    instructions executable by the computer to perform a method for managing  
4    presentation objects for multiple use, the method comprising:  
5            caching an object when downloaded; and  
6            capturing the object in permanent storage if a globally-unique identifier has  
7    been assigned to the object.

1           68.    The article of manufacture of claim 67 further comprising deleting  
2    previously captured objects to increase available capture memory.

1           69.    An article of manufacture comprising a program storage medium  
2    readable by a computer, the medium tangibly embodying one or more programs of  
3    instructions executable by the computer to perform a method for processing  
4    referenced objects, the method comprising:  
5            referencing an object by selected indicia, the selected indicia being a name, a  
6    globally-unique identifier or a globally-unique identifier and an object locator;  
7            searching for the object by the selected indicia; and  
8            determining whether to capture the object based upon whether the selected  
9    indicia includes a globally-unique identifier.

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